

PATENT

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CATALYST THAT COMPRISES A SILICA-ALUMINA AND ITS USE IN
HYDROCRACKING OF HYDROCARBON FEEDSTOCKS

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INVENTION
DISCLOSURE
REQUEST

Abstract

The invention relates to a catalyst that contains at least one silica-alumina, whereby said silica-alumina has the following characteristics:

- A content by weight of silica SiO_2 of between 10 and 60% by weight,
- an Na content that is less than 300 ppm by weight,
- a total pore volume of between 0.5 and 1.2 ml/g that is measured by mercury porosimetry,
- the porosity of said silica-alumina is as follows:
 - i/. The volume of these mesopores whose diameter is between 40 Å and 150 Å, and whose mean diameter varies between 80 and 120 Å represents between 30 and 80% of the total pore volume,
 - ii/. The volume of the macropores, whose diameter is

greater than 500 Å and preferably between 1000 Å and 10,000 Å represents between 20 and 80% of the total pore volume,

-- a specific surface area of greater than 200 m²/g, and at least one hydro-dehydrogenating element that is selected from the group that is formed by the metals of group VIB and group VIII, optionally an element that is selected from the group that is formed by phosphorus, boron and silicon, of group VIIA, the elements of groups VIIB and VB.

The invention also relates to the use of this catalyst for the transformation of hydrocarbon fractions, in particular hydrorefining and hydrocracking.

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